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We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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# RMB2S THRU RMB6S

## Features

- Surface Mount Package
- Glass Passivated Diode Construction
- Fast Recovery, Low Switching Loss
- Halogen free available upon request by adding suffix "-HF"
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1
- Lead Free Finish/Rohs Compliant (Note1) ("P" Suffix designates Compliant. See ordering information)

## Maximum Ratings

- Operating Temperature: -55°C to +150°C
- Storage Temperature: -55°C to +150°C

MCC Part Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
RMB2S	RMB2S	200V	140V	200V
RMB4S	RMB4S	400V	280V	400V
RMB6S	RMB6S	600V	420V	600V

## Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	$I_{F(AV)}$	0.5A <sup>(1)</sup> 0.8A <sup>(2)</sup>	$T_A = 30^\circ\text{C}$
Peak Forward Surge Current	$I_{FSM}$	30A	8.3ms, half sine
Maximum Instantaneous Forward Voltage	$V_F$	1.25V	$I_{FM} = 0.4A$ ; $T_A = 25^\circ\text{C}$
Maximum DC Reverse Current At Rated DC Blocking Voltage	$I_R$	5.0μA 100μA	$T_A = 25^\circ\text{C}$ $T_A = 125^\circ\text{C}$
Typical Thermal Resistance Per Leg	$R_{\theta JA}$ $R_{\theta JA}$ $R_{\theta JL}$	85°C/W <sup>(1)</sup> 70°C/W <sup>(2)</sup> 20°C/W <sup>(1)</sup>	PC board with 12mm <sup>2</sup> copper pads
Typical Junction Capacitance	$C_J$	13pF	Measured at 1.0MHz, $V_R = 4.0V$
Maximum Reverse Recovery Time RMB2S-RMB4S RMB6S	$t_{rr}$	150ns 250ns	$I_F = 0.5A$ , $I_R = 1.0A$ , $I_{rr} = 0.25A$
Rating For Fusing	$I^2t$	5.0A <sup>2</sup> s	$t < 8.30ms$

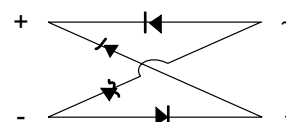
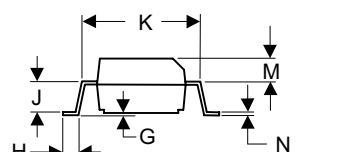
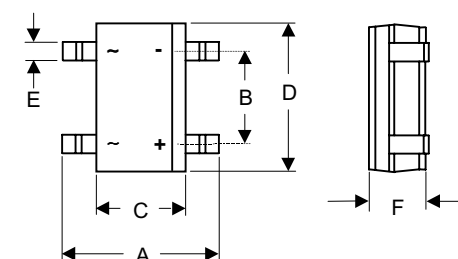
(1) On glass epoxy P.C.B. mounted on 0.05 x 0.05" (1.3 x 1.3mm) pads

(2) On aluminum substrate P.C.B. with an area of 0.8" x 0.8" (20 x 20mm) mounted on 0.05 x 0.05" (1.3 x 1.3mm) solder pad

Notes: 1. High Temperature Solder Exemption Applied, see EU Directive Annex Notes 7.

## 1/2 Amp Fast Recovery Glass Passivated Bridge Rectifier 200 to 600 Volts

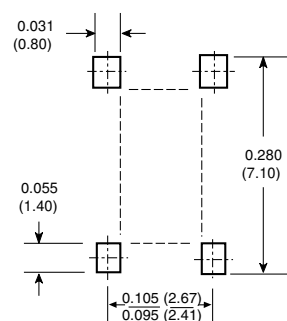
### MBS-1



Case Style

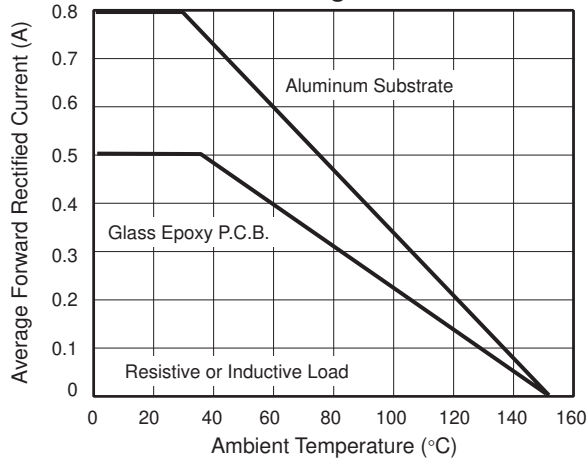
DIM	INC HES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.252	.276	6.40	7.00	
B	.095	.106	2.41	2.70	
C	.142	.165	3.60	4.20	
D	.179	.195	4.55	4.95	
E	.019	.031	0.50	0.80	
F	.090	.106	2.30	2.70	
G	.002	.008	0.05	0.20	
H	.027	.043	0.70	1.10	
J	.058	.062	1.47	1.57	
K	.195	.205	4.95	5.21	
M	.039	.049	0.99	1.24	
N	.006	.016	0.15	0.41	

### Mounting Pad Layout

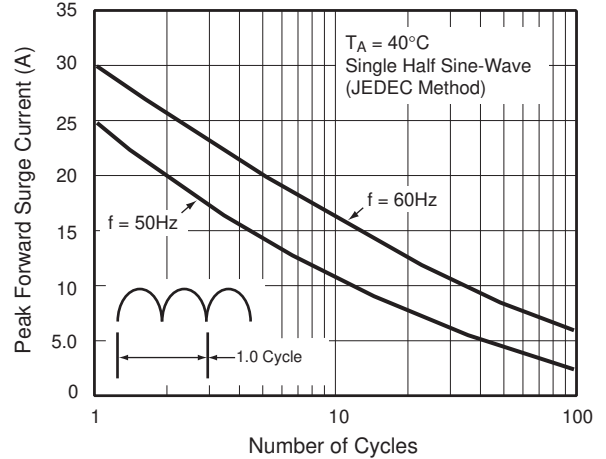


# RMB2S thru RMB6S

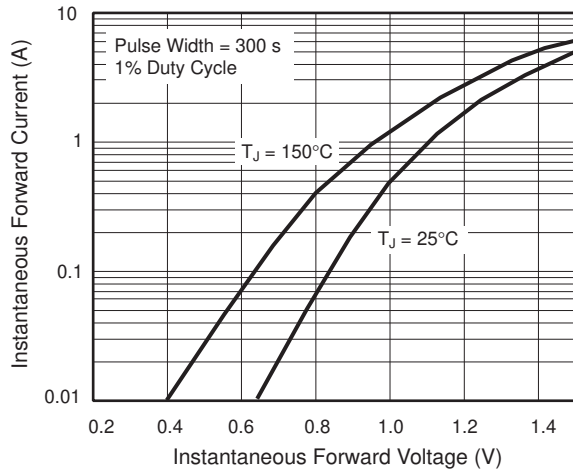
**Fig. 1 – Maximum Forward Current Derating Curve**



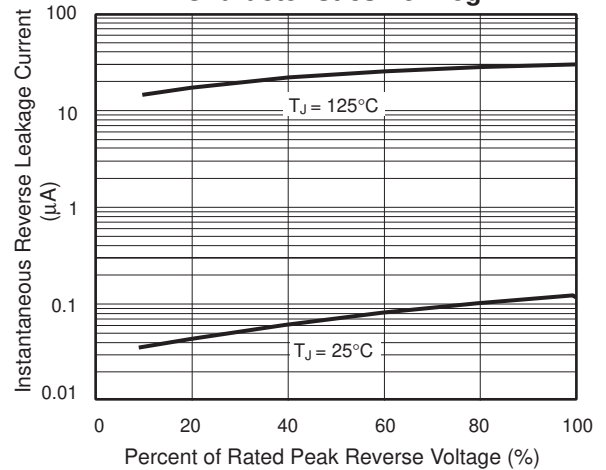
**Fig. 2 – Maximum Non-Repetitive Peak Forward Surge Current**



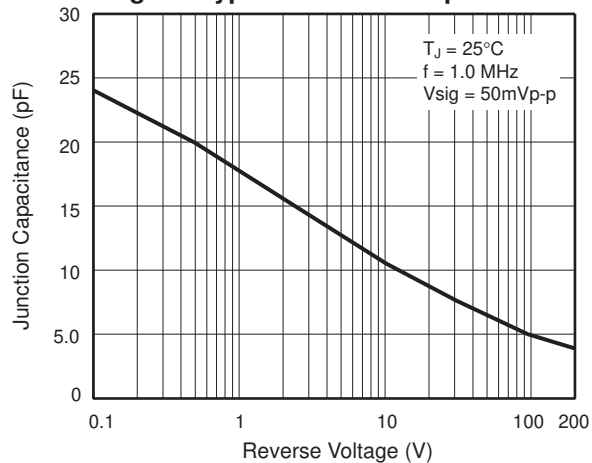
**Fig. 3 – Typical Instantaneous Forward Characteristics**



**Fig. 4 – Typical Reverse Leakage Characteristics Per Leg**



**Fig. 5 – Typical Junction Capacitance**





## Ordering Information :

Device	Packing
Part Number-TP	Tape&Reel: 3Kpcs/Reel

Note : Adding "-HF" suffix for halogen free, eg. Part Number-TP-HF

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